

Subject Index to Volume 19

A

- A23187: *see* Ionophore A23187
 Abdominal viscera, peripheral reflex pathways (guinea pig), G581
 4-Acetamido-4'-isothiocyano-stilbene-2,2'-disulfonic acid, sodium-bicarbonate symport and, hepatocytes, G491
 Acetylcholine
 calcium sources utilized by, gallbladder muscle, G785
 noradrenergic influences, ileum, G919
 prostaglandin actions and, cecum, G100
 release
 colonic muscle, G246
 enzyme-dissociated myenteric ganglia (guinea pig), G233
 N⁵-Acetyltransferase, activity, pentagastrin induction of, G16
 Acid
 gastric resistance to, G31
 load, duodenal ulcer, G1058
 secretion, 80-kDa phosphoprotein, parietal cell, G1070, G1082
 Acidosis, metabolic, electrolyte transport and, colon, G1036
 Acinus, sinusoidal volume, retrograde liver perfusion and, G1041
 Acridine orange, hydrogen permeability, gastrointestinal membrane vesicles, G553
 Adenine, liver nucleotide and, after fructose loading by ³¹P-NMR, G949
 Adenosine monophosphate, cyclic acid secretion, somatostatin linkage, stomach, G418
 dibutyl, mucus-secreting colonic epithelial cell line, G443
 electrolyte transport, cecum, G721
 protein phosphorylation and, colon carcinoma cells, G808
 sodium-glucose cotransport and, secretory cell line, G335
 stimulation, peptide interaction with pancreatic acini, G283
 Adenosine triphosphatase, calbindin stimulation, calcium pump, G124
 Adenosine triphosphate, calcium transport and, enterocyte basolateral membrane, G613
 Adenylate cyclase, mucus-secreting colonic epithelial cell line, G443
 Adenylate deaminase, liver nucleotide and, after fructose loading by ³¹P-NMR, G949
 β -Adrenergic agonists, inhibition, fundic mucosal mast cells, G727
 Aging
 cortisone and, cholera toxin in the developing intestine, G220
 EGF content and, gastrointestinal tract, G856
 Alanine, transport, ethanol effects, hepatic, G458
 Alcohol
 amino acid transport and, basolateral liver plasma membrane vesicles, G458

- hydrogen permeability, gastrointestinal membrane vesicles, G553
 Allergy, gut, colonic ion transport, G396
 Amiloride, carbon dioxide effects and, intracellular pH in gastric cells, G466
 Amino acids
 transport
 colon (hen), G532
 ethanol effects, hepatic, G458
 p-Aminohippurate, system, loop diuretic transport, kidney, G78
 Amylase
 CCK antagonists and, pancreatic secretion, G150
 secretion, insulin and somatostatin effects, pancreas, G897
 Anal sphincter, anal, length-tension relations of striated muscle, G773
 ANF: *see* Atrial natriuretic factor
 Antibiotics, intraluminal polyamines, colonic mucosa, G1049
 Antioxidants, prostaglandin E₂ production and, gastric mucosal cells, G925
 Arginine decarboxylase, obstruction-induced colonic mucosal hypertrophy, G1049
 Asparagine, putrescine uptake and, colon carcinoma cells, G868
 ATPase: *see* Adenosine triphosphatase; Hydrogen-ATPase; Potassium-ATPase; Sodium-potassium-ATPase
 Atrial natriuretic factor, binding sites, jejunum, G436
 Atropine
 ascending reflex pathways (guinea pig), G540
 serotonin release, TRH injection effects, G377
 Autonomic nervous system
 CRF-induced inhibition, gastric acid secretion, G214
 peripheral reflex pathways, abdominal viscera (guinea pig), G581
 Autoradiography
 neuropeptide Y cross-linking to receptor, brain membranes, G637
 quantitative electron microscope, VIP internalization, pancreatic cells, G689
- ## B
- Basolateral membrane
 calbindin stimulation of calcium pump, enterocytes, G124
 intestinal, inositol transport (fish), G501
 jejunum, rapid regulation of D-glucose transport, G878
 liver, amino acid transport, ethanol effects, G458
 Bethanechol chloride, serotonin release, TRH injection effects, G377
 Bethanecol, inhibition of pancreas, G698
 Bicarbonate
 electrolyte transport, chronic metabolic acidosis effects, colon, G1036
 intracellular pH
 gastric cells, G466
 regulation by sodium-hydrogen exchange, hepatocytes, G44

- secretion, duodenal, VIP antagonist effects, G833
 transport, sodium-coupled, hepatocytes, G491
 Bile
 flow
 bile acid-independent, glutathione role in, G22
 hypertonic stress effects, G563
 ursodeoxycholic acid, biliary tree, G653
 formation, sulfated cholic acid infusion and, G62
 secretion, regulation by sodium-hydrogen exchange, hepatocytes, G44
 Bile acids
 bile flow independent of, role of glutathione in, G22
 7-ketolithocholic acid reduction, liver enzyme preparations, G67
 permeability, biliary tree, G653
 secretion, sulfated cholic acid infusion and, G62
 transport system, hepatocytes, G78
 Bile salts, short-term, biliary obstruction, G312
 Biliary obstruction, bioelectric sinusoidal-canalicular barrier, dissipation of, taurocholate uptake and, G312
 Biliary tree, permeability, ursodeoxycholic acid, G653
 Biotin, transport, intestinal, G306
 Blood flow: *see also* Circulation
 duodenal, ulcer, G1058
 gastric
 calcitonin gene-related peptide effects, G145
 central neurotensin and, G226
 CRF effects, G412
 omeprazole and cimetidine, G390
 gastrointestinal, postprandial, during cold stress (piglet), G364
 Blood pressure, gastric, CRF effects, G412
 Bombesin
 ingestion, digestive cell proliferation and, suckling, G328
 nutrients and, CCK response to, G989
 receptors: *see* Receptors
 receptor subtypes, esophagus, G747
 Brain, membrane, neuropeptide Y cross-linking to receptor, G637
 Brush-border membrane
 intestinal
 proton permeability, G553
 sodium-phosphate cotransport, G645
 Brush-border membrane vesicles
 intestinal
 D-glucose and L-leucine transport, G618
 glutamine transport in, G240
 inositol transport (fish), G501
 regulation of biotin transport, G306
 Bumetanide, uptake, hepatocytes, G78

C

- Caco-2 cells, phosphorylation and chloride transport, protein, secretagogue-induced, G808

- Calcitonin gene-related peptide
acid secretion and blood flow with, gastric, G145
action, intestinal circular muscle (guinea pig), G546
inhibition of secretion, gastric and pancreatic, G715
- Calcium
absorption, calbindin stimulation of calcium pump, enterocytes, G124
gastric mucus secretion, mucosal explants, G739
milk, fate in GI tract of sucklings, G1063
pump: *see* Pump
sources, utilized by CCK and acetylcholine, gallbladder, G785
transport, enterocyte basolateral membrane, vitamin D₃ effects, G613
- Calmodulin, ornithine decarboxylase induction, G342
- Capillaries, jejunum, ANF binding sites, G436
- Capsaicin, nerves sensitive to, bile-oleate-induced hyperemia and, G476
- Carbachol
gene expression, gastric parietal cells, G631
parietal cells, gastric mucosa, G254
- Carbohyrase, stimulation, villus site of, jejunum, G158
- Carbon dioxide
intracellular pH and, gastric cells, G466
partial pressure, intracellular pH and, gastric mucosa (frog), G206
- Carbonic anhydrase II, gene expression, gastric parietal cells, G631
- Casein micelles, milk calcium, GI tract of sucklings, G1063
- Catalase, prostaglandin E₂ production and, gastric mucosal cells, G925
- Catecholamines, adrenergic contractions and, gastrointestinal tract, G589
- Cations, apical membrane potential and, gastric antrum (frog), G798
- CCK: *see* Cholecystokinin
- Cecum
electrolyte transport, RDEC-1 infection effects, G721
electrophysiology, ion transport and, G1090
muscarinic responses in, prostaglandin effects, G100
- CGRP: *see* Calcitonin gene-related peptide
- Chelators, copper metabolism and, hepatocytes, G667
- Chenodeoxycholic acid, formation from 7-ketolithocholic acid, liver enzyme preparations, G67
- Chief cells, desensitization of pepsinogen secretion, CCK-induced (guinea pig), G837
- Chloride
conductance, secretory membrane, parietal cells, G299
electrolyte transport, chronic metabolic acidosis effects, colon, G1036
secretion, secretory cell line, G335
transport, secretagogue-induced, Caco cells, G808
- Chloride ions, flux, intestine (flounder), G166
- Cholecystokinin
antagonists, pancreatic secretion and, G150
calcium sources utilized by, gallbladder muscle, G785
desensitization of pepsinogen secretion induced by, chief cells (guinea pig), G837
exocrine pancreas
inhibitory regulation, G698
model, G817
gastrin and, ornithine decarboxylase activity, pancreatic cell line, G846
mechanics, pylorus and gastric muscles, G862
plasma, in response to dietary fat, G1016
plasma (pig), G53
regulation of bombesin receptors, pancreatic acini (guinea pig), G291
response, bombesin and nutrients, G989
SBTI and, pancreatic digestive enzyme gene expression, G733
structural analysis, gastric smooth muscle tumors, G1005
- Cholecystokinin-releasing peptide, feedback regulation and, pancreatic secretion, G430
- Cholera toxin
developing intestine, G220
secretory cell line sensitive to, sodium-glucose cotransport in, G335
- Cholesterol, biliary, sulfated cholic acid infusion and, G62
- Cholic acid, sulfated cholic acid coinfusion, bile formation and, G62
- Chromatography, thin-layer, loop diuretic transport, liver, G78
- Chymotrypsinogen, CCK antagonists and, pancreatic secretion, G150
- Cimetidine, pentagastrin versus, gastric chamber, G390
- Circulation: *see also* Blood flow
intestinal, bile-oleate-induced hyperemia and, G476
liver, galactose and indocyanine green uptake, G524
- Cobalamin, identification and characterization, G517
- Colon
amino acid transport, interactions (hen), G532
apical membrane, ouabain-sensitive hydrogen-potassium exchange (guinea pig), G979
carcinoma cells
protein phosphorylation in, G808
putrescine uptake, G868
circular muscle, contraction generation, G570
electrolyte transport, chronic metabolic acidosis effects, G1036
ion transport, immunologic regulation, G396
motor activity, substance P effects, G997
noncholinergic excitation of muscle, substance P involvement in, G246
proximal
eicosanoid interactions, G673
rhythms and membrane potential, methylene blue effects, G779
- Colonic mucosa
obstruction-induced hypertrophy, microfloral-derived polyamine modulation of, G1049
SAT activity, pentagastrin induction of, G16
- Concanavalin A, histamine release and, fundic mucosal mast cells, G727
- Copper, metabolism, chelator effects, hepatocytes, G667
- Corticotropin-releasing factor
dissociated effects, acid secretion and blood flow, G412
inhibition, gastric acid secretion, G214
- Cortisone
aging and, cholera toxin in the developing intestine, G220
differential effects, jejunal sucrase expression, sucklings, G604
- Coupling
electromechanical, contraction generation in colon circular muscle, G570
excitation-contraction, toxin effects, intestinal smooth muscle, G759, G767
stimulus-secretion, gastric mucus secretion, mucosal explants, G739
- CRF: *see* Corticotropin-releasing factor
- Current, short-circuit, cecum, G1090
- Cyclooxygenase, inhibition, proximal colon, G673
- Cytochalasin, binding, basolateral membrane of jejunum, G878
- Cytoprotection, ethanol injury, prostaglandin effects, stomach (guinea pig), G704

D

- Desipramine, norepinephrine and, liver, G107
- Development: *see also* Growth
intestinal, cholera toxin and, G220
jejunal, microvillus membrane, G931
- Diaphragm, sphincteric action, relaxed lower esophageal sphincter, G139
- Dicarboxylic acid, metabolism, liver, G680
- Diet: *see* Feeding
- Difluoromethylornithine, epithelial proliferation and, G342
- Digestive enzymes, CCK antagonists and, pancreatic secretion, G150
- 1,25-Dihydroxyvitamin D₃: *See* Vitamin D₃
- Diprenorphine
binding, submucosal neurons, G957
³H-labeled, small intestine, G966
- Diuretic, loop, transport in the liver, G78
- Duodenum
bicarbonate secretion, VIP antagonist effects, G833
calcium transport, vitamin D₃ effects, G613
length, glucose inhibition of gastric emptying and, G404
smooth muscle contraction, neutral endopeptidase inhibitors and (ferret), G39
ulcer, pathogenesis, G1058

E

- EGF: *see* Epidermal growth factor
- Eicosanoids, interactions, proximal colon, G673
- Electrolytes
absorption, cecum, G1090
transport
cecum, RDEC-1 infection, G721
colon, chronic metabolic acidosis effects, G1036
- Electromyography, diaphragm, relaxed lower esophageal sphincter, G139
- Electrophysiology
cecum, G1090
smooth muscle, gastrointestinal model of propagation, G265

voltage-driven fluid secretion, hepatocyte couplets, G826

Endocytosis, receptor-mediated, iron-deficient liver, G1022

Endopeptidase, neutral inhibitors, substance P-induced contraction, gut smooth muscle (ferret), G39

Endothelin, vasoconstrictor injury and, stomach, G661

Endothelium-derived contracting factor, endothelin, stomach, G661

Endotoxin, PAF-acether and, gastric motility changes, G275

Enkephalinase, gut smooth muscle contraction, neutral endopeptidase inhibitors and (ferret), G39

Enteric nerves
eicosanoid responses and, proximal colon, G673
excitatory and inhibitory, calcitonin gene-related peptide action (guinea pig), G546
ileal, epithelial responses to secretagogues, G919

Enteric nervous system
ascending reflex pathways (guinea pig), G540
calcitonin gene-related peptide action (guinea pig), G546
substance P effects, different experimental states, G997

Enterocytes
basolateral membranes
calbindin stimulation of calcium pump, G124
calcium transport, 1,25-dihydroxyvitamin D₃ effects, G613
distribution of absorbed lipids, phosphatidylcholine effects and, G349
jejunum, ANF binding sites, G436
metabolites, quantitation, NMR spectroscopy (chicken), G423
spermidine uptake, G905

Epidermal growth factor
content, gastrointestinal tract, G856
ornithine decarboxylase and, small intestine, G624

Epithelial cells
digestive, proliferation, bombesin ingestion and, suckling, G328
mucus-secreting colonic, VIP receptors in, G443

Esophageal sphincter
lower
adrenergic contractions, neuropeptide Y and, G589
inhibition through gastric nerves (opossum), G198
sphincteric action of diaphragm, G139

Esophagus
distension, sphincteric action of diaphragm, G139
neuromedin B receptors, G747

Ethanol
amino acid transport and, basolateral liver plasma membrane vesicles, G458
injury, stomach, prostaglandin effects (guinea pig), G704
leucine uptake and, hepatocytes, fetal, G384

F

Fasting, EGF content and, gastrointestinal tract, G856

Fat, dietary, plasma secretin, CCK, and pancreatic secretion in response to, G1016

Fatty acids, diet, intestinal uptake and, G178

Feedback, regulation, CCK-releasing peptide and, pancreatic secretion, G430

Feeding
diet, pancreatic digestive enzyme gene expression, G733
dietary fat, plasma secretin, CCK, and pancreatic secretion in response to, G1016
EGF content and, gastrointestinal tract, G856
fatty acid saturated diet, nutrient uptake and, intestine, G178

Fetus, leucine uptake, hepatocytes, ethanol effects, G384

Fibroblasts, jejunum, ANF binding sites, G436

Forskolin, enzyme-dissociated myenteric ganglia (guinea pig), G233

Fructose, metabolism, liver, ³¹P-NMR of, G949

Furosemide, chloride ion transport and, intestine (flounder), G166

G

Galactose, indocyanine green and, changes in hepatic blood volume, G524

Galanin, inhibitory functions, pylorus, G789

Galanin-immunoreactive nerves, enteric, distribution and function, G884

GAL-IR: see Galanin-immunoreactive nerves

Gallamine trithiodide, striated muscle, external anal sphincter, G773

Gallbladder, cholecystokinin and acetylcholine, calcium sources utilized by, G785

Ganglia, myenteric, enzyme-dissociated, acetylcholine release from (guinea pig), G233

Gastric acid
secretion
calcitonin gene-related peptide effects, G145
carbonic anhydrase II gene expression, G631
CRF effects, G412
CRF-induced inhibition of, G214
parietal cell mass and, G975
parietal cells, G129, G356
somatostatin linkage, stomach, G418

Gastric antrum, intrinsic nerves, VIP-PHI and galanin effects, G789

Gastric cells, intracellular pH, carbon dioxide effects, G466

Gastric chief cells, prostaglandin protection of (guinea pig), G704

Gastric emptying, inhibition, glucose, intestine length and, G404

Gastric glands
80-kDa phosphoprotein, parietal cell stimulation and, G1070
parietal cells, chloride conductance in, G299

Gastric lumen
secretion, feedback regulation of, CCK and, G430
serotonin release, TRH injection effects, G377

Gastric mucosa
adherence, RDEC-1 infection effects, G721
explants, mucus secretion, secretagogue action, G739
histamine release, β -adrenergic inhibition of, mast cells, G727
injury, endothelin and, G661
integrity, central neurotensin and, G226
intracellular pH in, carbon dioxide partial pressure effects (frog), G206
parietal cell, secretagogue-responsive, G254
protein kinase C, secretory activity in parietal cells, G129
resistance to acid, G31

Gastric mucosal cells, prostaglandin E₂ production, oxygen metabolite effects, G925

Gastric nerves, intrinsic, inhibition of lower esophageal sphincter (opossum), G198

Gastrin
CCK and, ornithine decarboxylase activity, pancreatic cell line, G846
gene expression, gastric parietal cells, G631
ornithine decarboxylase and, small intestine, G624
parietal cells, gastric mucosa, G254
receptors: see Receptors
SAT activity, pentagastrin induction, G16

Gastrin-releasing peptides, neuromedin B receptor, esophagus, G747

Gastroenterology, developmental, epithelial digestive cell proliferation, G328

Gastrointestinal hormones
control, pylorus and gastric muscle, G862
exocrine pancreas, model, G817

Gastrointestinal tract
adrenergic contractions, neuropeptide Y and, G589
EGF content, age and feeding effects, G856
fat of milk calcium, sucklings, G1063

Gene expression, pancreatic digestive enzymes, CCK and SBTI effects on, G733

Glucagon, stimulation of oxygen uptake, liver, G369

Glucose
inhibition of gastric emptying, intestine length and, G404
zinc absorption and, small intestine, G87

D-Glucose
regulation of biotin transport and, intestines, G306
transport
intestinal brush-border membrane vesicles, G618
regulation, basolateral membrane of jejunum, G878

Glutamine, transport, intestinal brush-border membrane vesicles, G240

Glutathione
biliary excretion, bile acid-independent bile flow, G22
efflux, hepatic, determinants of, G482

Glycoprotein
gastric mucus secretion, mucosal explants, G739
mucous, *Yersinia enterocolitica* effects, G319

- Goblet cell, mucin secretion, *Yersinia enterocolitica* effects, G319
- Growth: *see also* Development
colonic mucosa, pentagastric induction of SAT activity, G16
ornithine decarboxylase and, small intestine, G624
polyamine-dependent, ornithine decarboxylase, G342
spermidine uptake and, enterocytes, G905
- Growth hormone-releasing factor
mucus-secreting colonic epithelial cell line, G443
VIP-secretin related peptides, pancreatic acini (guinea pig), G283
- Gut: *see* Intestine

H

- Hepatocytes
bicarbonate transport, sodium-coupled, G491
bumetanide uptake, G78
copper metabolism, chelator effects, G667
couplets, voltage-driven, taurocholate-dependent secretion, G826
inward-rectifying potassium channels, G1028
leucine uptake, ethanol effects, fetal, G384
sodium-hydrogen exchange activity, G44
transferrin and iron uptake and distribution, iron-deficient liver, G1022
volume, hypertonic stress effects, G563
- Hexamethonium, ascending reflex pathways (guinea pig), G540
- Histamine
acid secretion, somatostatin linkage, stomach, G418
colonic ion transport, immunologic regulation, G396
gastric acid secretion and, parietal cell mass, G975
gene expression, gastric parietal cells, G631
noradrenergic influences, ileum, G919
parietal cells, gastric mucosa, G254
release, β -adrenergic inhibition of, mast cells, G727
serotonin release, TRH injection effects, G377
- Histoautoradiography, bombesin ingestion, epithelial digestive cell proliferation and, G328
- Hydrogen-ATPase, apical membrane, colon (guinea pig), G979
- Hydrogen gas, clearance, CRF effects, G412
- Hydrogen peroxide, prostaglandin E_2 production and, gastric mucosal cells, G925
- Hydrogen-potassium-ATPase
chloride conductance and, parietal cells, G299
80-kDa phosphoprotein and, apical membrane, gastric parietal cells, G1082
parietal cells, gastric mucosa, G254
- Hydrogen-potassium exchange, ouabain-sensitive mechanism, apical membrane, colon (guinea pig), G979
- Hydroxyverapamil, calcium sources and, gallbladder muscle, G785

- Hyperemia, bile-oleate-induced, capsaicin-sensitive nerves and, G476
- Hyperglycemia, basolateral membrane, jejunum, G878
- Hyperinsulinemia, glucose transport and, intestine, G911
- Hypoinsulinemia, glucose transport and, intestine, G911

I

- Ileum
distribution of opioid receptors, implications for function, G966
epithelial responses, secretagogues, G919
D-glucose and L-leucine transport, G618
 β -lactoglobulin transport, G943
migrating myoelectric complex (bird), G598
smooth muscle contraction, neutral endopeptidase inhibitors and (ferret), G39
- Immunoreactivity
bombesin and nutrients, CCK release and, G989
CGRP inhibition, gastric and pancreatic secretion, G715
- Indocyanine green, galactose and, changes in hepatic blood volume, G524
- Indomethacin, action on muscarinic responses, cecum, G100
- Infant: *see also* Neonate; Newborn
low-birth-weight, fate of milk calcium, GI tract, G1063
- Inositol
transport
intestinal basolateral membrane (fish), G509
intestinal brush-border membrane vesicles (fish), G501
- Insulin
amylase secretion and, pancreas, G897
glucose transport and, intestinal, G911
- Intestine
absorbed lipids, intraenterocyte distribution, G349
absorption, villous structure and, G188
basolateral membrane, inositol transport (fish), G501
biotin transport, regulation of, G306
brush-border membrane vesicles, inositol transport (fish), G501
CCK, plasma (pig), G53
chloride ion flux (flounder), G166
developing, cholera toxin and, G220
epithelial responses, secretagogues, G919
glucose transport, insulin modulation of, G911
intrinsic nerves, galanin and VIP comparison, G884
 β -lactoglobulin transport, G943
length, glucose inhibition of gastric emptying and, G404
mucin secretion, *Yersinia enterocolitica* effects, G319
motility: *See* Motility
nutrient uptake, saturated fatty acid diet effects, G178
secretion, kinin mediation of, G1
smooth muscle, *Clostridium difficile* toxins, G759, G767
sodium-phosphate cotransport, identification, G645
- Intestine, large, ion transport, immunologic regulation, G396

- Intestine, small
acetylcholine release, enzyme-dissociated myenteric ganglia (guinea pig), G233
ANF binding sites, G436
ascending enteric reflex pathways (guinea pig), G540
circular muscle, calcitonin gene-related peptide action (guinea pig), G546
distribution of opioid receptors, implications for function, G966
ornithine decarboxylase in, G624
pancreatic intrinsic factor, identification, G517
zinc absorption, G87
- Iodoantipyrine, autoradiography, duodenal ulcer, G1058
- Ionophore A23187, chloride ion transport and, intestine (flounder), G166
- Ions
transport
cecum, G1090
colonic, immunologic regulation, G396
- Iron, uptake, iron-deficient liver, G1022

J

- Jejunum
ANF binding sites, G436
basolateral membrane, rapid regulation of D-glucose transport, G878
D-glucose and L-leucine transport, G618
glucose transport, insulin modulation of, G911
length, glucose inhibition of gastric emptying and, G404
microsphere entrapment in, time-related changes, G451
microvillus membrane, development of, G931
sucrase expression, thyroxine and cortisone effects, sucklings, G604
villus structure, distension effects, G188
villus column, carbohydrase stimulation of, G158
- Junction, gastroesophageal, intrinsic reflexes (opossum), G198

K

- 7-Ketolithocholic acid, reduction, liver enzyme preparations, G67
- Kinins, intestinal secretion and, G1

L

- Lactate dehydrogenase, release, ethanol injury and, stomach (guinea pig), G704
- β -Lactoglobulin, transport, ileal, G943
- Leiomyosarcomas, gastric smooth muscle, CCK structural analysis, G1005
- Length-tension relations, striated muscle, external anal sphincter, G773
- Leucine
interaction with lysine, intestinal transport (hen), G532
uptake, ethanol effects, hepatocytes, fetal, G384
- L-Leucine, transport, intestinal brush-border membrane vesicles, G618
- Lipids
absorbed, intraenterocyte distribution, G349
dietary, intestinal uptake, G178
dynamics, gastric and duodenal apical membrane vesicles, G553

- permeability: *see* Permeability
- Liver**
- amino acid transport, ethanol effects, G458
 - bile acid-independent bile flow, role of glutathione in, G22
 - blood volume, galactose and indocyanine green uptake, G524
 - dicarboxylic acid metabolism, G680
 - enzyme preparations, reduction of 7-ketolithocholic acid in, G67
 - fructose metabolism, ³¹P-NMR of, G949
 - glutathione efflux, determinants of, G482
 - handling of tracer norepinephrine, G107
 - inward-rectifying potassium channels, G1028
 - iron-deficient, uptake of transferrin and iron in, G1022
 - loop diuretic transport in, G78
 - oxygen uptake, stimulation by glucagon, G369
 - retrograde perfusion, increased sinusoidal volume and solute extraction, G1041
 - voltage-driven fluid secretion, hepatocyte couplets, G826
- Lysine, interaction with leucine, intestinal transport (hen), G532
- M**
- Maltase-glucoamylase, stimulation, villus site of fasted jejunum, G158
- Mannitol, hypertonic stress and, liver, G563
- Mast cells, fundic mucosal, β -adrenergic and prostanoid inhibition, G727
- Membrane**
- apical
 - gastric and duodenal, proton permeability of, G553
 - 80-kDa phosphoprotein localization, gastric parietal cells, G1082
 - ouabain-sensitive hydrogen-potassium exchange, colon (guinea pig), G979
 - basolateral: *see* Basolateral membrane
 - microvilli, jejunum, development of, G931
- Methylene blue, rhythm and membrane potential, proximal colon, G779
- Microdensitometry, puterized, ANF binding sites, jejunum, G436
- Microflora, polyamines derived from, obstruction-induced colonic mucosal hypertrophy, G1049
- Microscopy, light and electron, ANF binding sites, jejunum, G436
- Microspheres**
- entrapment, jejunum, time-related changes, G451
 - radiolabeled, hCGRP effects on gastric acid secretion and blood flow, G145
- Migrating motor complex, postprandial, modulation by sleep, G851
- Migrating myoelectric complex, small intestine (bird), G598
- Milk**
- calcium, fate in GI tract of sucklings, G1063
 - EGF content, age and feeding effects, G856
- Models**
- exocrine pancreas heterogeneity, G817
 - galactose and indocyanine green uptake, hepatic blood volume and, G524
 - propagation, gastrointestinal electrical activity, G265
- Morphine, opioid receptors, migrating myoelectric complexes, G72
- Motility**
- colonic, substance P effects, G997
 - gastric
 - changes induced by PAF-acether and endotoxin, G275
 - TRH stimulation of, G1011
 - gastrointestinal
 - glucose inhibition of gastric emptying, G404
 - mechanics and neuropeptide responses, G862
 - methylene blue effects, proximal colon, G779
 - neuropeptide Y and, G589
 - opioid receptors and migrating myoelectric complexes, G72
 - pharmacology of emesis, G92
 - intestinal
 - Clostridium difficile* toxins, G759, G767
 - kinin mediation of secretion, G1
 - migrating myoelectric complex (bird), G598
- Motor activity, postprandial, modulation by sleep, G851
- Mucin, secretion, intestinal, *Yersinia enterocolitica* effects, G319
- Mucus, secretion, secretagogue action, gastric mucosal explants, G739
- Muscle**
- colon circular, contraction generation, G570
 - colonic, noncholinergic excitation, substance P in, G246
 - esophagus, neuromedin B receptors, G747
 - gastrointestinal, electrical activity, model of propagation, G265
 - intestinal, contraction, kinins and, G1
 - intestinal circular
 - ascending contraction (guinea pig), G540
 - calcitonin gene-related peptide action on (guinea pig), G546
 - striated, anal sphincter, length-tension relations, G773
- Muscle, smooth
- acetylcholine and CCK, calcium sources utilized by, gallbladder, G785
 - circular, prostaglandin actions on muscarinic responses, G100
 - electrophysiology, contraction generation, G570
 - gastric
 - mechanics and neuropeptide responses in, G862
 - tumors, CCK structural analysis, G1005
 - gut, substance P-induced contraction; neutral endopeptidase inhibitors and (ferret), G39
 - intestinal, *Clostridium difficile* toxins, G759, G767
 - proximal colon, rhythms and membrane potential, methylene blue effects, G779
- Myenteric plexus, distribution of opioid receptors, implications for function, G966
- Myoelectric complex, migrating, opioid receptors and, G72
- N**
- Naloxone, opioid receptors, migrating myoelectric complexes, G72
- Neonate: *see also* Infant; Newborn
- jejunal microvillus membrane, development of, G931
- Nerves, capsaicin-sensitive, bile-oleate-induced hyperemia and, G476
- Neuromedin B, receptors: *see* Receptors
- Neurons**
- afferent, calcitonin gene-related peptide action (guinea pig), G546
 - peripheral activity, gastric motility, G275
 - submucosal, opioid and β_2 -adrenergic receptors in, G957
 - sympathetic, abdominal viscera (guinea pig), G581
- Neuropeptides**
- bile-oleate-induced hyperemia, capsaicin-sensitive nerves and, G476
 - enzyme-dissociated myenteric ganglia (guinea pig), G233
 - gastric acid secretion and, CRF-induced inhibition, G214
 - inhibitory, galanin and VIP, gastrointestinal tract, G884
 - responses, pylorus and gastric muscle, G862
- Neuropeptide Y
- adrenergic contractions and, lower esophageal sphincter, G589
 - cross-linking to receptor, brain membranes, G637
- Neurotensin
- central affects, gastric mucosal integrity, G226
 - mechanics, pylorus and gastric muscles, G862
- Neurotransmitter
- cholinergic, autoregulation, parietal cells, G356
 - enzyme-dissociated myenteric ganglia (guinea pig), G233
 - multiple systems and interactions (guinea pig), G540
- Newborn: *see also* Infant; Neonate
- blood flow and oxygen consumption and, postprandial gastrointestinal, during cold stress (piglet), G364
- NMR: *see* Nuclear magnetic resonance
- Norepinephrine
- chloride ion transport and, intestine (flounder), G166
 - secretagogue interaction, epithelial responses of ileum and, G919
 - tracer, handling by liver, G107
- Nuclear magnetic resonance
- ³¹P-, fructose loading by, liver, G949
 - phosphorus, enterocyte metabolites (chicken), G423
- Nucleus ambiguus, TRH analogue stimulation, gastric contractility, G1011
- Nutrients**
- bombesin and, CCK response to, G989
 - uptake, intestinal, diet and radiation effects, G178
- O**
- Omeprazole, pentagastrin versus, gastric chamber, G390

- Opiates, gastric acid secretion, CRF-induced inhibition of, G214
- Opioids, receptors: *see* Receptors
- Ornithine decarboxylase
activity, CCK and gastrin effects, pancreatic cell line, G846
- calmodulin-regulated induction, polyamine-dependent growth and, G342
- mucosal, small intestine, G624
- Ouabain
hydrogen-potassium exchange mechanism sensitive to, apical membrane, colon (guinea pig), G979
- spermidine uptake and, enterocytes, G905
- Oxidation, dicarboxylates, liver, G680
- Oxygen
consumption, postprandial, during cold stress (piglet), G364
- delivery, glutathione efflux and, liver, G482
- uptake, stimulation by glucagon, liver, G369
- Oxygen metabolites, prostaglandin E₂ production and, gastric mucosal cells, G925
- Oxyntic gland, SAT activity, pentagastrin induction of, G16

P

- PAF: *see* Platelet-activating factor
- Pancreas
amylase secretion, islet hormone effects, G897
- exocrine
heterogeneity of, G817
- peptide YY and polypeptides, G698
- secretion
CCK antagonists and, G150
- feedback regulation of, CCK and, G430
- inhibition by CGRP, G715
- in response to dietary fat, G1016
- Pancreatic acini
bombesin receptors, regulation by CCK, G291
- neuromedin B receptor, esophagus, G747
- VIP and secretin, interaction of peptides (guinea pig), G283
- VIP internalization, ultrastructural analysis, G689
- Pancreatic cells
 β -, VIP internalization in, G689
- ornithine decarboxylase activity, CCK and gastrin stimulation of, G846
- Pancreatic digestive enzymes, gene expression, CCK and SBTI effects, G733
- Pancreatic intrinsic factor, identification and characterization, G517
- Parietal cells
apical membrane, 80-kDa phosphoprotein, G1082
- gastric, carbonic anhydrase II gene expression, G631
- gastric mucosa, carbon dioxide partial pressure effects on pH (frog), G206
- mass, gastric acid secretion and, G975
- muscarinic gastrin receptors, autoregulation, G356
- secretagogue-responsive, gastric mucosa, G254
- secretory activity, protein kinase C, G129
- secretory membrane, chloride conductance in, G299
- stimulation, 80-kDa phosphoprotein, G1070
- Penicillamine, copper metabolism and, hepatocytes, G667
- Pentagastrin
acid secretion, somatostatin linkage, stomach, G418
- gastric acid secretion, CRF and, G412
- induction of spermine/spermidine SAT activity, G16
- omeprazole and cimetidine versus, gastric chamber, G390
- serotonin release and, gastric lumen, G377
- Pepsin, stomach acid resistance to, G31
- Pepsinogen
desensitization of secretion, CCK-induced, chief cells (guinea pig), G837
- secretion, ethanol injury and, stomach (guinea pig), G704
- Peptide histamine isoleucine, inhibitory functions, pylorus, G789
- Peptide histidine isoleucine, noradrenergic influences, ileum, G919
- Peptides: *see also* Polypeptides
brain, gastric contractility and, G1011
- CCK-releasing, feedback regulation of, pancreas, G430
- intestinal secretion, kinin mediation of, G1
- motor activity and, colonic, G997
- vasoactive intestinal
bicarbonate secretion and, duodenal, G833
- bile-oleate-induced hyperemia and capsaicin-sensitive nerves, G476
- comparison with GAL-IR, G884
- inhibitory functions, pylorus, G789
- internalization, pancreatic cells, G689
- receptors: *See* Receptors
- secretin and, pancreatic acini (guinea pig), G283
- Peptides YY, pancreatic, inhibitory regulation of exocrine pancreas, G698
- Peristalsis, intestinal circular muscle, calcitonin gene-related peptide action (guinea pig), G546
- Permeability
cation, apical membrane potential, antrum (frog), G798
- lipid, development of the jejunum, G931
- potassium, hepatocytes, G1028
- proton, gastric and duodenal apical membrane vesicles, G553
- ursodeoxycholic acid, biliary tree, G653
- Peroxisomes, liver, G680
- Pertussis toxin, acid secretion, somatostatin linkage, stomach, G418
- pH
apical membrane potential and, gastric antrum (frog), G798
- gradient, gastric resistance to acid, G31
- intracellular
carbon dioxide effects, gastric cells, G466
- gastric mucosa, carbon dioxide effects (frog), G206
- regulation by sodium-hydrogen exchange, hepatocytes, G44
- PHI: *see* Peptide histamine isoleucine
- Phorbol esters, gastric acid secretion and, parietal cells, G129
- Phosphatidylcholine, distribution of absorbed lipids and, enterocytes, G349

- Phospholipids, biliary, sulfated cholic acid infusion and, G62
- Phosphoprotein
80-kDa
apical membrane of parietal cells, G1082
- parietal cell stimulation, G1070
- Platelet-activating factor, endotoxin and, gastric motility changes, G275
- Plexus
deep muscular, distribution of opioid receptors, G966
- submucosal, opioid and β_2 -adrenergic receptors in, G957
- Polyamines
microfloral-derived, obstruction-induced colonic mucosal hypertrophy, G1049
- ornithine decarboxylase and, small intestine, G624
- uptake, enterocytes, G905
- Polypeptides: *see also* Peptides
pancreatic, inhibitory regulation of exocrine pancreas, G698
- vasoactive intestinal
colon carcinoma cells, G808
- noradrenergic influences, ileum, G919
- Postprandial activity, modulation by sleep, G851
- Potassium
electrolyte transport, chronic metabolic acidosis effects, colon, G1036
- regulatory fluxes, hypertonic stress effects, G563
- Potassium-ATPase, apical membrane, colon (guinea pig), G979
- Potassium channels, inward-rectifying, hepatocytes, G1028
- Potentials
excitatory junction, prostaglandin actions on cecum, G100
- membrane
apical, cation and pH effects, antrum (frog), G789
- hepatocyte couplets, G826
- inward-rectifying potassium channels, G1028
- rhythms and, methylene blue effects, proximal colon, G779
- sodium-bicarbonate symport, hepatocytes, G491
- spike, contraction generation in colon circular muscle, G570
- Proglumide, inhibition, fat-stimulated pancreatic secretion, G1016
- Prostaglandin D₂, interactions with prostaglandin E₂, proximal colon, G673
- Prostaglandin E₂
bicarbonate secretion and, duodenum, G833
- gastric mucosal integrity, central neurotensin and, G226
- production, oxygen metabolite effects, gastric mucosal cells, G925
- Prostaglandins
action on muscarinic responses, cecum, G100
- colonic ion transport, immunologic regulation, G396
- ethanol injury and, stomach (guinea pig), G704
- Prostanoids, inhibition, fundic mucosal mast cells, G727
- Protein
absorption, ileal, G943

calcium-binding, calbindin stimulation of calcium pump, enterocytes, G124
phosphorylation, secretagogue-induced, Caco-2 cells, G808
secretion, exocrine pancreas, G817
Protein kinase C
action on secretory activity, parietal cells, G129
autoregulation, muscarinic gastrin receptors, parietal cells, G356
CCK-induced desensitization of pepsinogen secretion and, chief cells (guinea pig), G837
Pump, calcium, calbindin stimulation of, enterocyte basolateral membranes, G124
Putrescine
epithelial proliferation and, G342
uptake, colon cancer cells, G868
Pylorus
mechanics, neuropeptide responses and, G862
VIP-PHI and galanin effects, G789

R

Rabbit diarrheagenic *Escherichia coli*, infection, electrolyte transport and, cecum, G721
Radiation, diet and, intestinal uptake of nutrients, G178
Radioimmunoassay, CCK, plasma (pig), G53
Rauwolscine, binding, submucosal neurons, G957
RDEC-1: see Rabbit diarrheagenic *Escherichia coli*
Receptors
 β_2 -adrenergic, biochemical studies on submucosal neurons, G957
bombesin, regulation by CCK, pancreatic acini (guinea pig), G291
CCK, gastric smooth muscle tumors, G1005
cholinergic, GI correlates of emesis, G92
gastrin, pepsinogen secretion and, chief cells (guinea pig), G837
muscarinic gastrin, autoregulation, gastric parietal cells, G356
neurokinin, colonic muscle, G246
neuromedin B, esophagus, G747
opioid
biochemical studies on submucosal neurons, G957
distribution in small intestine, G966
migrating myoelectric complexes and, G72
peptide, intestinal (guinea pig), G283
VIP, mucus-secreting colonic epithelial cell line, G443
Reflexes
ascending enteric, pathways (guinea pig), G540
intrinsic, stomach (opossum), G198
peripheral pathways, abdominal viscera (guinea pig), G581
Resistance, gastric, acid, G31
Rhythm, membrane potential and, methylene blue effects, proximal colon, G779

S

SAT: see *N*¹-Acetyltransferase
Saxitoxin, ³H-labeled, small intestine, G966

SBTI: see Soybean trypsin inhibitor
Secretagogues
acid secretion stimulated by, parietal cell mass, G975
calcium-dependent actions, gastric mucus secretion, mucosal explants, G739
epithelial responses to, ileum, G919
parietal cell response, gastric mucosa, G254
protein phosphorylation induced by, Caco-2 cells, G808
Secretin
CCK antagonists and, pancreatic secretion, G150
plasma, in response to dietary fat, G1016
Serine ethanolamine phosphodiester, enterocyte metabolites, NMR spectroscopy (chicken), G423
Serotonin, gastric luminal release, TRH injection effects, G377
Shunt, microsphere, entrapment in jejunum, G451
Sinusoidal-canalicular barrier, bioelectric, biliary obstruction and, G312
Sleep, modulation of postprandial motor activity, G851
Slow wave, gastrointestinal, model of propagation, G265
Sodium
absorption, secretory cell line, G335
bicarbonate transport, hepatocytes, G491
electrolyte transport, chronic metabolic acidosis effects, colon, G1036
glutamine cotransport mechanism, intestinal brush-border membrane vesicles, G240
zinc absorption and, small intestine, G87
Sodium-glucose, cotransport, secretory cell line, G335
Sodium-hydrogen exchange, activity, hepatocytes, G44
Sodium-phosphate, cotransport, intestinal, G645
Sodium-potassium-ATPase
cholera toxin and, developing intestine, G220
rhythms and membrane potential, proximal colon, G779
Sodium-potassium-chloride ion, cotransport, intestine (flounder), G166
Solutes
clearance, inert, biliary obstruction, G312
extraction, increased, retrograde liver perfusion, G1041
transport
intestinal basolateral membrane (fish), G509
intestinal brush-border membrane vesicles (fish), G501
Somatostatin
acid secretion and, stomach, G418
amylase secretion and, pancreas, G897
CGRP inhibition, gastric and pancreatic secretion, G715
Soybean trypsin inhibitor, CCK and, pancreatic digestive enzyme gene expression, G733
Species differences, inositol transport, intestinal, carnivorous and herbivorous (fish), G501, G509
Spectroscopy, NMR, quantitation of enterocyte metabolites (chicken), G423

Spermidine
modulation, obstruction-induced colonic mucosal hypertrophy, G1049
uptake, enterocytes, G905
Spermine/spermidine, SAT activity, pentagastrin induction of, G16
Stomach: see also Gastric
acid secretion, somatostatin linkage, G418
endothelin effects, G661
ethanol injury, prostaglandin effects (guinea pig), G704
hydrogen permeability, gastrointestinal membrane vesicles, G553
intrinsic reflexes (opossum), G198
omeprazole and cimetidine, versus pentagastrin, G390
pancreatic intrinsic factor, identification, G517
secretion, inhibition by CGRP, G715
Streptozotocin, glucose transport, insulin modulation of, intestine, G911
Stress
cold, blood flow and oxygen consumption during, gastrointestinal (piglet), G364
hypertonic, liver cell volume, bile flow, and volume regulatory potassium fluxes, G563
Strontium, calcium sources and, gallbladder muscle, G785
Substance P
contraction induced by, gut smooth muscle, neutral endopeptidase inhibitors and (ferret), G39
involvement, noncholinergic excitation, colonic muscle, G246
mechanics, pylorus and gastric muscles, G862
motor activity and, colonic, G997
Suckling
digestive epithelial cell proliferation, bombesin ingestion and, G328
GI tract, fate of milk calcium in, G1063
thyroxine and cortisone effects, jejunal sucrase expression, G604
Sucrase-isomaltase
jejunal expression, thyroxine and cortisone effects, sucklings, G604
stimulation, villus site of fasted jejunum, G158
Sucrose, hypertonic stress and, liver, G563
Superoxide diamutase, prostaglandin E_2 production and, gastric mucosal cells, G925
Sympathetic nervous system, adrenergic contractions, neuropeptide Y and, G589

T

Tachykinin
gut smooth muscle contraction, neutral endopeptidase inhibitors and (ferret), G39
noncholinergic excitation, colonic muscle, G246
Taurocholate
secretion dependent on, hepatocyte couplets, G826
uptake, biliary obstruction and, G312
Tetrodotoxin, PAF-acether and, gastric motility changes, G275
Theophylline, chloride ion transport and, intestine (flounder), G166

- Thermoregulation, blood flow and oxygen consumption and, postprandial gastrointestinal (piglet), G364
- Thyroidectomy, gastric acid secretion and, parietal cell mass, G975
- Thyroid hormones, gastric acid secretion and, parietal cell mass, G975
- Thyrotropin-releasing hormone intracisternal injection, gastric luminal serotonin release and, G377
- medullary sites for, gastric contractility, G1011
- Thyroxine differential effects, jejunal sucrase expression, sucklings, G604
- gastric acid secretion and, parietal cell mass, G975
- Toxin, bacterial, intestinal smooth muscle, G759, G767
- Trace elements, metabolism, chelator effects, hepatocytes, G667
- Transferrin, uptake and distribution, iron-deficient liver, G1022
- TRH: *see* Thyrotropin-releasing hormone
- Trichinosis, colonic ion transport, immunologic regulation, G396
- Twitch-tetanus response, striated muscle, external anal sphincter, G773

U

- Ulcer, duodenal, pathogenesis, G1058
- Ulceration, endothelin and, stomach, G661
- Ulcerogenics, vasoconstrictors and, stomach, G661
- Ursodeoxycholic acid formation from 7-ketolithocholic acid, liver enzyme preparations, G67
- permeability, biliary tree, G653

V

- Vagus nerve stimulation, exocrine pancreas, peptide YY and, G698
- TRH analogue stimulation, gastric contractility, G1011
- Valinomycin, chloride conductance and, parietal cells, G299
- Vasoconstrictors, ulcerogenics and, stomach, G661
- Vasopressin, gastric acid secretion and, CRF-induced inhibition, G214
- VIP: *see* Peptides, vasoactive intestinal
- Vitamin D₃, 1,25-dihydroxy-, enterocyte basolateral membrane calcium transport and, G613
- Volume blood, liver, metabolism effects, G524

- regulation, hypertonic stress effects, liver, G563
- sinusoidal, solute extraction and, retrograde liver perfusion, G1041
- Vomiting, gastrointestinal motor correlates in, pharmacology of, G92

W

- Water unstirred layer, absorption and villous structure, intestine, G188
- zinc absorption and, small intestine, G87
- Wilson's disease, chelator effects, hepatocytes, G667

X

- Xanthine oxidase, prostaglandin E₂ production and, gastric mucosal cells, G925

Y

- Yersinia enterocolitica*, mucin secretion and, intestinal, G319

Z

- Zinc, absorption, small intestine, G87

Author Index to Volume 19

- Abumurad, N., G240
Adelson, J. W., G817
Adeniyi, K. O., G931, G975
Agranoff, B. W., G356
Ahearn, G. A., G501, G509
Ahmad, S., G957, G966
Algazi, M. C., G833
Allescher, H. D., G789, G957, G966
Ambrosic, K. A., G613
Amirian, D. A., G925
Amuro, Y., G67
Anteunis, A., G689
Astesano, A., G689
Augeron, C., G443
Avidan, A., G1011
- Bach, G. G., G107
Ballard, H. J., G553
Ballatori, N., G22, G482
Barajas-López, C., G570
Barry, J. A., G618
Barthó, L., G546
Bass, N. M., G1041
Batt, R. M., G517
Bauer, V., G546
Bauerfeind, P., G145
Beck, I. T., G451
Behar, J., G785
Bernard, C., G989
Biancani, P., G785
Bianchi, C., G436
Blissard, D., G299
Blum, A. L., G145
Boedeker, E. C., G721
Borson, D. B., G39
Boyd, C. A. R., G423
Boyer, J. L., G482, G826, G1028
Brewer, G. J., G87
Briggs, G. M., G158
Brisson, J., G680
Britto, J., G851
Brooks, B. D., G884
Brown, M. R., G254
Brzozowski, T., G704
Bunnett, N. W., G715
Burke, E. P., G779
Burnham, D. B., G808
- Campbell, I. D., G423
Campbell, V. W., G631
Cantin, M., G436
Cantor, P., G53
Carlsson, E., G390
Carter, K. J., G206, G466
Castillo, R. O., G158
Castro, G. A., G396
Charles, N., G989
Chayvialle, J. A., G989
Cheeseman, C. I., G178, G878
Chen, H.-S., G833
Chen, M. C., G925
Cherner, J. A., G704, G837
Cheung, L. Y., G798
Chew, C. S., G254
Chey, W. Y., G1016
Chiba, T., G356
Chu, S.-H. W., G220
Cirino, G., G661
- Clandinin, M. T., G178
Clauss, W., G1090
Clench, M. H., G598
Cohen, S., G862
Collins, J. C., G306
Colony, P. C., G226
Condon, R. E., G72
Corbic, M., G653
Cotting, J., G312
Cousineau, D., G107
Creaser, L., G667
Cuber, J. C., G989
Cucala, M., G145
- Daniel, E. E., G789, G884, G957, G966
Danks, D. M., G667
Das-Gupta, A., G851
Davis, D., G856
Debas, H. T., G715
Delcore, R., G798
De Léan, A., G436
Del Valle, J., G631
Dent, J., G789
De Nucci, G., G661
Desjeux, J. F., G335, G943
Deutscher, J., G78
De Vries, L., G846
Dinda, P. K., G451
Djokic, T. D., G39
Dorsett, J. A., G233
Doty, J. E., G404
Draye, J.-P., G680
Drüge, G., G214
Dryden, D. T. F., G553
Dumont, M., G653
Dumontier, A.-M., G943
- Ely, I. G., G220
Erlinger, S., G653
Esplugues, J. V., G275
- Farges, O., G653
Favus, M. J., G613
Feldman, G. M., G1036
Fischer, J. A., G145
Fisher, S. K., G356
Fitz, J. G., G491
Föllmann, W., G78
Fondacaro, J. D., G808
Formal, S. B., G721
Forte, J. G., G1070, G1082
Fox, J. E. T., G789, G884
Fraser, S., G349
Friestman, J., G1016
Frosto, T. A., G384
- Gage, T. P., G721
Gaginella, T. S., G1
Gall, D. G., G319
Gardner, J. D., G283, G291, G747
Garrick, T., G1011
Garry, D. J., G897
Garry, M. G., G897
Genest, J., G436
Ghishan, F. K., G240
Giampaolo, C., G759
- Gilbert, R. J., G759, G767
Ginty, D. D., G342
Gonda, T., G884
Goresky, C. A., G107
Goresky, S., G107
Graf, J., G563, G826, G1028
Grasset, E., G443
Green, G. M., G1016
Greenway, C. V., G524
Grendell, J. H., G150
Greten, H., G214
Grimes, J., G856
Gross, S. M., G667
Guth, P. H., G412, G1058
- Hada, T., G67
Hadac, E. M., G1005
Haddad, P., G563
Haddox, M. K., G624
Hanson, P. J., G129
Hanzel, D. K., G1070, G1082
Hardin, J., G319
Harig, J. M., G618
Hatt, J. F., G129
Hawn, M., G631
Heinz-Erian, P., G747
Heitman, D. W., G384
Hejblum, G., G689
Helton, W. S., G715
Henderson, G. I., G384
Henderson, R. M., G1028
Henning, S. J., G1063
Hersey, S. J., G299
Heyman, M., G335, G943
Higashino, K., G67
Hightower, J., G418
Hirst, B. H., G553
Ho, F. J., G246
Hof, A., G145
Hof, R., G145
Hoffmann, B., G1090
Hogan, D. L., G833
Holmes, J. M., G1022
Holt, P. R., G604
Holzer, P., G540, G546
Holzheimer, G., G188
Horadagoda, N. U., G517
Hörnacke, H., G1090
Hou, J., G997
Hubel, K. A., G919
Huizinga, J. D., G570
- Innes, I. R., G524
Isenberg, J. I., G833
Ishikawa, T., G1011
Ito, S., G466
Ives, M. M., G390
- Jacobson, E. D., G476
Jain, R., G905
Jensen, N. F., III, G390
Jensen, R. T., G283, G291, G747
Johnson, L. R., G624, G868, G905
- Kachur, J. F., G1
Kaiser, L. M., G637
Kaneko, K., G979
- Kauffman, G. L., Jr., G226
Keelan, M., G178
Keenan, C. M., G673
Kheroua, O., G943
Kicsak, K. M., G589
King, B. F., G581
King, G. F., G423
Kinne, R. K. H., G78
Kitamura, K., G100
Kizaki, Z., G369
Koelbel, C. B. M., G246
Koldovsky, O., G856
Koss, M. A., G833
Kostka, P., G966
Krier, J., G773
Kudo, K., G67
Kumagai, J., G905
Kumar, D., G851
Kuriyama, H., G100
Kwan, C. Y., G966
Kwong, L. K., G158
- Laboisie, C., G443
LaBurthe, M., G443
Lake, J. R., G44
Lam, T., G178
LaMont, J. T., G759, G767
Lang, I. M., G92
Larsen, K. R., G390
Larsson, H., G390
Lee, H. H., G87
Lee, K. Y., G785
Lee, S., G107
Lehy, T., G328
Lenz, H. J., G214
Leung, F. W., G412, G1058
Lewis, L. D., G733
L'Helgoualc'h, A., G335
Liddle, R. A., G698, G733, G1016
Lin, H. C., G404
Ljungström, M., G254
Logsdon, C. D., G733
Louie, D., G430
Lu, L., G430
- Ma, A. K., G482
MacNaughton, W. K., G661
Maenz, D. D., G878
Mahoney, W. C., G897
Makhlouf, G. M., G418
Manaka, H., G957
Manaka, Y., G957
Manning, J. A., G1041
Mannon, P. J., G637
Mansbach, C. M., II, G349
Mantey, S. A., G747
Mantle, M., G319
Maoret, J.-J., G443
Marcon-Genty, D., G943
Marvig, J., G92
Mathias, J. R., G598
Matusák, O., G546
Maurice, M., G653
Mayer, E. A., G246
Mayfield, S. R., G364
McArdle, H. J., G667
McCallum, R. W., G139
McCormack, S. A., G868

- McDonald, T. J., G884
 McKnight, W., G661
 McLean, L., G517
 McQueen, C., G721
 Merlo, A., G862
 Meyer, J. H., G404
 Meyer, R. A., G773
 Mignault, D., G62
 Miller, L. J., G1005
 Miller, P. E., G817
 Mittal, R. K., G139
 Mock, D. M., G306
 Moore, C. D., G798
 Moran, T., G747
 Morgan, E. H., G1022
 Morrill, J. S., G158
 Morton, D. B., G517
 Moseley, R. H., G458
 Mridha, K., G851
 Mulholland, M. M., G715
 Müller, N., G78
 Munck, B. G., G532
 Murphy, S. M., G458
- Nadel, J. A., G39
 Naik, L., G704, G837
 Nakao, K., G100
 Nath, S. K., G335
 Nellans, H. N., G613
 Nguyen, T. D., G637
 Niederau, C., G150
 Niederau, M., G150
 Nylander, W., G240
- Ogorek, C. P., G589
 Oh, W., G364
 Oki, M., G884
 Olowookorun, M. O., G931, G975
 Olson, C. E., G925
 Osborne, D. L., G1049
 Otterson, M. F., G997
 Owyang, C., G87, G430
- Pandol, S. J., G833
 Park, J., G631
 Parkman, H. P., G589
 Parlier, R. D., G349
 Parr, E. L., G233
 Patel, A., G246
 Pearson, R. K., G1005
 Pearce, B. E., G645
 Percy, W. H., G198, G773
 Perez, A., G299
 Persico, M., G44, G491
- Petzinger, E., G78
 Piñeiro-Carrero, V. M., G598
 Piva, D. L., G364
 Portha, B., G689
 Pothoulakis, C., G759, G767
 Pradayrol, L., G846
 Prasad, A. S., G87
 Prokopiw, I., G451
 Publicover, N. G., G265
 Puccio, F., G328
 Pushka, K. L., G524
 Putnam, W. S., G698
- Quirk, P. G., G423
- Raedler, A., G214
 Rajendran, V. M., G618
 Ramaswamy, K., G618
 Rangachari, P. K., G673
 Rao, R. K., G856
 Rautureau, M., G335
 Redha, R., G240
 Reedy, T. J., G404
 Reeve, J. R., Jr., G246
 Reggio, H., G335
 Rehfeld, J. F., G53
 Reichen, J., G312
 Ren, J., G198
 Renner, E. L., G44
 Renquist, K. S., G919
 Reshkin, S. J., G501, G509
 Reynolds, J. C., G589
 Rochester, D. F., G139
 Rose, C., G107
 Rosewicz, S., G733
 Rosselin, G., G689
 Roumagnac, I., G443
 Rouyer-Fessard, C., G443
 Rozsa, Z., G476
 Russell, D. A., G396
 Rutten, M. J., G798
- Saario, I., G206
 Sachs, G., G299
 Said, H. M., G240, G306
 Sanders, K. M., G265, G779
 Sargeson, A. M., G667
 Sarna, S. K., G997
 Scemama, J. L., G846
 Schäfer, H., G1090
 Scharschmidt, B. F., G44, G491
 Schaudies, R. P., G856
 Schenker, S., G384
 Schubert, M. L., G418
- Schulze-Delrieu, K., G198
 Schwab, A. J., G107
 Scott, G. D., G524
 Scremin, O. U., G1058
 Seaton, J. F., G226
 Seidel, E. R., G16, G342, G1049
 Seidler, U., G206, G466, G739
 Sekizawa, K., G39
 Seva, C., G846
 Sewing, K.-Fr., G739
 Shirazi, S. S., G198
 Siegrist, S., G145
 Sierra, A., G1011
 Silen, W., G206, G466
 Simmons, M. A., G1063
 Simpson, K. W., G517
 Singh, G., G704, G837
 Sitar, D. S., G524
 Smolka, A., G254, G1082
 Snape, W. J., Jr., G246
 Snyder, R. G., G16
 Soergel, K. H., G618
 Soffer, E. E., G851
 Soll, A. H., G727, G925
 Sorenson, R. L., G897
 Soybel, D. I., G798
 Stachura, J., G704
 Steinbach, J., G833
 Stephens, R. L., G377, G1011
 Stevens, R. J., G779
 Stonestreet, B. S., G364
 Storelli, C., G501, G509
 Strohmeier, G., G150
 Sunshine, P., G158
 Suzuki, Y., G979
 Szurszewski, J. H., G72, G581
- Tache, Y., G377, G412, G1011
 Taguchi, S., G1016
 Tai, Y.-H., G721
 Tarnawski, A., G704
 Taylor, I. L., G637
 Telford, G. L., G72
 Tembe, V., G613
 Thakore, E., G319
 Thalhammer, T., G563
 Thibault, G., G436
 Thieffin, G., G412
 Thoma, W. J., G949
 Thomson, A. B. R., G178
 Thurman, R. G., G369
 Tipnis, U. R., G624
 Tome, D., G943
 Toomey, M., G727
- Triadafilopoulos, G., G759
 Tronchere, H., G846
 Truong, A. T., G22, G482
 Tseng, C.-C., G624
 Tsuboi, K. K., G158
 Tuchweber, B., G62
- Ugurbil, K., G949
 Urushidani, T., G1070, G1082
 Usinger, W. R., G1082
- Vamecq, J., G680
 Van Voorhis, K., G240
 Varley, G., G919
 Vaysse, N., G846
 Vilas, F., G989
 Vilella, S., G501, G509
 Vinayek, R., G291
 Von Derau, K., G198
 Von Ritter, C., G145
 Von Schrenck, T., G747
- Walker, K., G178
 Walker, W. A., G220
 Wallace, J. L., G31, G661
 Walters, J. R. F., G124
 Wang, P., G624
 Wang, X.-Y., G733
 Wank, S. A., G291
 Washington, J. H., G226
 Weber, A., G62
 Weiner, H., G1011
 Weinman, S. A., G826
 Weisiger, R. A., G1041
 Westergaard, H., G911
 White, J. F., G166
 Whittle, B. J. R., G275
 Wilkes, J. M., G553
 Williams, J. A., G698, G897
 Wingate, D. L., G851
 Winne, D., G188
- Yamada, T., G356, G631
 Yamade, W., G67
 Yamamoto, T., G67
 Yau, W. M., G233
 Yeh, K.-Y., G604
 Yeh, M., G604
 Younes, M., G291
 Yousef, I. M., G62
- Zhang, L., G226
 Zhou, Z.-C., G283
 Zysset, T., G312

